

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 – 3 (Canceled).

4. (Currently Amended) An image forming apparatus according to claim 1, further comprising:

a controller for determining whether or not document data given have a capacity larger than a first predetermined value;

a first code pattern creating portion for creating code patterns by encoding the document data, if the controller determines that the document data have a greater capacity than the first predetermined value;

a reducing portion for reducing the document data by a second predetermined value, if the controller determines that the document data have a greater capacity than the first predetermined value;

a second code pattern creating portion for encoding the document data reduced by the reducing portion to create code patterns;

a print function for forming images on a recording medium based on the code patterns created by at least one of the first code pattern creating portion and the second code pattern creating portion;

a scanner for reading the code patterns on the recording medium formed by the print function;

a creating portion for recognizing the code patterns read by the scanner, and creating temporary document data based on the code patterns;

a controller for determining whether or not there exist data deleted by the reducing portion based on the code patterns recognized by the creating portion;

a controller for determining the temporary document data as final document data, if the controller determines that no data has been deleted from the code patterns; and

a supplementing portion for acquiring predetermined data from data other than the code patterns and incorporating the predetermined data into the temporary document data created by the creating portion, if the controller determines that the predetermined data have been deleted from the code patterns to restore the final document data.

5. (Original) An image forming apparatus according to claim 4, wherein the scanner includes

function for reading the code patterns formed on the back of the recording medium.

6. (Original) An image forming apparatus according to claim 4, wherein the supplementing portion includes

function for restoring the final document data by incorporating predetermined data restored by reading images formed on the front side of the recording through the print function into the temporary document data created by the creating portion.

7. (Original) An image forming apparatus comprising:

- a scanner for reading code patterns on a recording medium;
- a creating portion for recognizing the code patterns read by the scanner and creating temporary document data based the code patterns;
- a controller for determining whether or not predetermined image data have been deleted based on the code patterns recognized by the creating portion;
- a controller for determining the temporary document data created by the creating portion as final document data, if the controller determines that no data have been deleted from the code patterns; and

a supplementing portion for restoring predetermined data from data other than the code patterns and incorporating the restored predetermined data into the temporary document data created by the creating portion to restore the final document data, if the controller determines that the predetermined data have been deleted from the code patterns.

Claims 8 – 10 (Canceled).

11. (Currently Amended) An image forming method according to claim 8, further comprising:

a step of determining, by a controller, whether or not document data given have a capacity larger than a first predetermined value;

a step of encoding the document data as it is to create code patterns by a code pattern creating portion, if the controller determines that the document data have a capacity not exceeding the first predetermined value;

a step of reducing the document data by a second predetermined value by a reducing portion, if the controller determines that the document data have a capacity greater than the first predetermined value;

a step of encoding the document data reduced by the reducing portion, by a code pattern creating portion to create code patterns;

an image forming step of forming images by a print function on a recording medium based on the document data and the code patterns created in the code pattern creating portion;

a reading step of reading the code patterns, by the scanner, formed on the recording medium by a print function;

a step of recognizing the code patterns read by the scanner and creating temporary document data based thereon by an electronic document creating portion;

a step of determining by the controller whether or not there exist data that have been deleted by the reducing portion based on the code patterns recognized by the creating portion;

a step of determining the temporary document data created by the creating portion as final document data, if the controller determines that no data have been deleted from the code patterns; and

a restoring step of restoring predetermined data by a supplementing portion from data other than the code patterns and incorporating the thus restored predetermined data into the temporary document data created by the creating portion to restore the final document data, if the controller determines that the predetermined data have been deleted from the code patterns in the reducing portion.

12. (Original) An image forming method according to claim 11, wherein the reading step includes

a step of reading the code patterns, by the scanner, formed on the back of the recording medium by the print function.

13. (Original) An image forming apparatus according to claim 11, wherein the restoring step includes

a step of incorporating predetermined data restored by the supplementing portion, by means of reading the images formed on the front side of the recording medium by the scanner formed by the print function, into the temporary document data, so as to restore the final document data, if the controller determines that the predetermined data have been deleted from the code patterns by the reducing portion.

14. (Currently Amended) An image forming apparatus comprising:
a step of reading code patterns on a recording medium by a scanner;

a step of recognizing the code patterns read by the scanner and creating temporary document data by a creating portion based thereon;

a step of determining by a controller whether or not predetermined image data have been deleted based on the code patterns;

a step of determining the temporary document data created by the creating portion as final document data, if the controller determines that no data have been deleted from the code patterns by a reducing portion; and

a step of restoring predetermined data from data other than the code patterns and incorporating the thus restored data into the temporary document data created by the creating portion to restore the final document data by a the supplementing portion, if the controller determines the predetermined data have been reduced from the code patterns.